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Cc: [Chip Humphrey/R10/USEPA/US@EPA](#); [Robert Dexter](#); [Eric Blischke/R10/USEPA/US@EPA](#)
Subject: RE: Friday morning telecon on background tech issues
Date: 05/13/2008 09:11 AM

Burt –

It wasn't clear to me if the LWG was going to provide a summary of the background conference call on Friday, but I wanted to make sure we had some discussion before decisions get finalized this week. Here's what I think I heard on Friday.

- Mike

ND substitutions – The LWG is OK with using ProUCL to handle non-detect values. I think we are in agreement.

Identification of outliers – EPA is open to recommendations on whether to include or exclude statistical outliers. The LWG will provide support for their position as an intermediate step in the review process. This seems reasonable to me.

Organic-carbon normalization – I'm not clear where we ended up on this one. Going into the meeting, EPA's position was to not allow normalization. The LWG still recommended normalization. You said it would be OK to do the background analysis with and without normalization, and that we would look at the results before deciding how to proceed. The LWG advocated for agreeing on a process rather than interrupt the evaluation for meetings and intermediate decisions. I understood this to mean if they found that normalizing the data made a difference, they would proceed with an evaluation of the normalized data. I'm concerned that the LWG might complete a detailed and lengthy evaluation that we might later disagree with. Did we agree to a process, or will the LWG provide us with an intermediate evaluation so we can decide the merit of the approach they propose? Jennifer and Matt disagree with using normalization, but they were not on the conference call. I am not sufficiently aware of EPA guidance to challenge the LWG's position that their approach is recommended in guidance. If they are referring to partitioning guidance, it may not be as relevant as background guidance.

Data sets – I don't think either the LWG or the EPA thought that this was critical right now. The most important application appeared to be in surface water, where data from RM 11 and 16 would be combined if the data are indistinguishable. I do not have a sense of how important this is. Did we agree with the LWG?

Comparison of datasets – The LWG talked about using hilltopping, and then comparing study area data with upstream data. In general we talked about using non-parametric methods to compare medians (50th percentiles). You mentioned that if the data are not normal, they should use a non-parametric method rather than transform the data. The LWG wants to have a process for this so they can avoid going to EPA with an intermediate step in the evaluation.

PRGs – The LWG appeared to be looking for one number to represent a background value as a PRG. I said I thought PRGs should be risk-based, and that background levels, although important, shouldn't be incorporated until a later stage, such as remedial goals in the FS. We agreed that decisions on this issue were not urgent, and could wait for the PRG discussions. I then tried to explain the problems associated with trying to characterize background data with one value (e.g., mean, upper percentile, upper prediction limit, upper tolerance limit). I suggested that background be regarded as a distribution, and referred to the approaches recommended in ProUCL guidance. I'm not sure I was clear about this. At any rate, the LWG agreed to think about how best to characterize background.